

REMARKS/ARGUMENTS

In the Office Action mailed November 1, 2007, claims 1-10 were rejected. In response, Applicant hereby requests reconsideration of the application in view of the amended claims and the below-provided remarks.

For reference, claims 1 and 5 are amended. In particular, claim 1 is amended to recite at least one guaranteed throughput input buffer coupled to at least one data switch input, wherein the at least one guaranteed throughput input buffer is configured to store only one unit of guaranteed throughput data at a time. This amendment is supported, for example, by the original language of claims 2 and 3. Accordingly, claims 2 and 3 are canceled. Additionally, with regard to the original language of claim 3, Applicant submits that the specification of the present application describes the guaranteed throughput (GT) input buffers as potentially being only one deep. What this means, within the context of the present application, is that the guaranteed throughput input buffer may be of a size and/or configuration to store only one unit of guaranteed to put data at a time. As one example, the guaranteed throughput input buffer may store only one packet (or other unit of data) at a time. Storing one unit of guaranteed throughput data in each of the guaranteed throughput input buffers allows embodiments of the guaranteed throughput input buffers to save both hardware and software scheduling control and/or minimize latency of the guaranteed throughput data. See page 4, lines 32-34, of the present application.

Claim 5 is amended to recite scheduling, in one step, guaranteed throughput data for switching, wherein the one step comprises a reservation of input and/or outputs. This amendment is supported, for example, by the original language of claims 7 and 8. Accordingly, claims 7 and 8 are canceled.

New claims 11-21 are added. Applicant respectfully submits that these claims are supported, for example, by Fig. 1(a) and the accompanying description, as well as the original language of claims 3, 4, and 6-9. These amendments are also supported, for example, by the subject matter described in the paragraph beginning on page 5, line 1, of the specification.

Claim Rejections under 35 U.S.C. 112

Claim 3 was rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In particular, claim 3 was rejected because it includes the term “one deep.” Applicant respectfully submits that claim 3 is canceled and, hence, the rejection of claim 3 under 35 U.S.C. 112, second paragraph, is moot.

Claim Rejections under 35 U.S.C. 103

Claims 1-9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Chiussi (U.S. Pat. Pub. No. 2003/0142624, hereinafter Chiussi) in view of Odman (U.S. Pat. Pub. No. 2003/0152059, hereinafter Odman). Additionally, claim 10 was rejected under 35 U.S.C. 103(a) as being unpatentable over Chiussi in view of Odman and further in view of Hill (U.S. Pat. Pub. No. 2003/0035422, hereinafter Hill). However, Applicant respectfully submits that the pending claims are patentable over Chiussi, Odman, and Hill for the reasons provided below.

Independent Claim 1

Claim 1 recites “at least one guaranteed throughput input buffer coupled to at least one data switch input, wherein the at least one guaranteed throughput input buffer is configured to store only one unit of guaranteed throughput data at a time” (emphasis added).

The Office Action relies solely on Chiussi as purportedly teaching a guaranteed throughput input buffer that is one deep. The Office Action does not rely on any other references as potentially teaching a guaranteed throughput input buffer that is one deep. Applicant respectfully submit that, despite the assertions of the Office Action, Chiussi does not teach a guaranteed throughput input buffer to store only one unit of guaranteed throughput data at a time. Chiussi merely teaches storing received packets for each guaranteed bandwidth flow 402 in one of the flow queues 502. While the Office Action interprets this to mean that each flow queue 502 only carries one guaranteed bandwidth flow, the guaranteed bandwidth flow includes more than one unit of guaranteed bandwidth data. Therefore, the flow queue 502 stores multiple units (e.g., packets) of

guaranteed bandwidth data at a time in order to accommodate the guaranteed bandwidth flow 402. Moreover, Chiussi does not describe the flow queue 502 as storing only one unit of guaranteed bandwidth data at a time.

Therefore, the combination of Chiussi and Odman does not teach all of the limitations of the claim because Chiussi does not teach storing only one unit of guaranteed bandwidth data at a time in the flow queues 502. Accordingly, Applicant respectfully submits that claim 1 is patentable over the combination Chiussi and Odman because the combination of cited references does not teach all of the limitations of the claim.

Independent Claim 5

Claim 5 recites “scheduling, in one step, guaranteed throughput data for switching, wherein the one step comprises a reservation of inputs and/or outputs” (emphasis added).

The Office Action relies solely on Chiussi as purportedly teaching one step of reserving inputs and/or outputs to schedule a guaranteed throughput data. However, Chiussi merely describes sending a frame to an outgoing link. Applicant submits that sending a frame to an outgoing link is not the same as a reservation because sending the frame is part of the actual transmission of the frame, and is not part of a precursor reservation operation. In other words, by initiating the actual transmission of the frame to a particular output link, there is no need to reserve the corresponding output link because the transmission of the frame has already begun. Thus, sending the frame to the outgoing link is not a reservation of the outgoing link, but rather actual use of the outgoing link.

Additionally, although Chiussi describes using two subframes to combine the guaranteed bandwidth flows and the best effort flows in a single frame, Chiussi does not describe putting the guaranteed bandwidth flow within the first subframe in order to reserve the output link. Chiussi merely describes, generally, sending guaranteed bandwidth flows and best effort flows in a single frame, but does not describe putting the guaranteed bandwidth flows and the best effort flows into the frame, separate from the actual transmission of the frame. In other words, the description in Chiussi at best describes combining both the guaranteed bandwidth flows and the best effort flows into a

single frame at the time the frame is transmitted. Since Chiussi does not describe creating the frame separately from transmitting the frame, the description of Chiussi is insufficient to support the assertion that putting the guaranteed bandwidth flow within the subframe purportedly implements a reservation of inputs and/or outputs.

Therefore, the combination of Chiussi and Odman does not teach all of the limitations of the claim because Chiussi does not teach scheduling guaranteed throughput data in one reservation step to reserve inputs and/or outputs. Accordingly, Applicant respectfully submits that claim 1 is patentable over the combination Chiussi and Odman because the combination of cited references does not teach all of the limitations of the claim.

Dependent Claims

Claims 4, 6, 9, and 10 depend from and incorporate all of the limitations of the corresponding independent claims 1 and 5. Applicant respectfully asserts claims 4, 6, 9, and 10 are allowable based on allowable base claims. Additionally, each of claims 4, 6, 9, and 10 may be allowable for further reasons.

New Claims

Applicant respectfully submits claims 11-21 are patentable over the cited references because the cited references, either alone or in combination, do not teach all of the limitations of the claims.

CONCLUSION

Applicant respectfully requests reconsideration of the claims in view of the amendments and remarks made herein. A notice of allowance is earnestly solicited.

At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account **50-3444** pursuant to 37 C.F.R. 1.25. Additionally, please charge any fees to Deposit Account **50-3444** under 37 C.F.R. 1.16, 1.17, 1.19, 1.20 and 1.21.

Respectfully submitted,

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